

[METHOD OF FORMING BIT LINES AND BIT LINE CONTACTS IN A MEMORY DEVICE]

Abstract

A method for forming bit lines and bit line contacts in a memory device is provided. A conductive layer is formed over a substrate to cover a plurality of gate structures thereon. A chemical-mechanical polishing operation is performed to polish the conductive layer so that a cap layer of the gate structures is exposed. A portion of the conductive layer is removed so that only the conductive layer between two neighboring gate structures is retained to serve as a bit line contact. A bit line is formed over the substrate such that the bit line and the bit line contact are electrically connected. Because the bit line contact has a smaller dimension compared with a bit line contact formed using the conventional method, the possibility of having a short circuit between a bit line contact and an adjacent bit line is reduced.